

21. (new) A device for decorating ceramic tiles, the device comprising

projection means for projecting ink on each tile in order to print a pattern on the tile, said tile arranged on a conveyor means for conveyance in accordance with a trajectory;

at least one printing head respectively comprising at least two printing modules that are connected to a control unit, each of the printing modules being arranged to project ink on the tile in accordance with a marking width corresponding to a portion of a tile width;

operation of each printing module being independently controlled by the control unit,

each printing module comprising an independent microprocessor and an independent memory, and

each printing module being an extractable module comprising connecting means for individual connection to the printing head;

wherein the printing modules are arranged in parallel with a degree of nonalignment with respect to each other and obliquely with respect to the trajectory of the tile, such that the marking width of each printing module extends to the marking width of at least one adjacent printing module.

AMENDMENT

U.S. Appln. No. 09/555,945

2489-1-001

22. (new) A device according to claim 21, wherein the marking widths of the printing modules cover at least the tile width.

23. (new) A device according to claim 21, wherein the microprocessor and the memory comprised in each printing module are connected to the control unit by means of a control circuit arranged in said each printing module.

24. (new) A device according to claim 21, wherein said at least one printing head comprises a plurality of serially-arranged printing heads, and wherein the printing modules of the plurality of printing heads are arranged such that the marking widths thereof cover at least the entire tile width.

25. (new) A device according to claim 21, comprising at least as many parallel-arranged printing heads as printing colors are required to print the pattern.

26. (new) A device according to claim 21, wherein the control unit comprises communication means for connecting with other computers and to allow remote management and verification of the device.

AMENDMENT

U.S. Appln. No. 09/555,945

2489-1-001

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200
200
200*
27. (new) A device according to claim 21, having a printing quality higher than 200 dpi.

28. (new) A printing device for printing on surfaces, the device comprising

projection means for projecting ink on a surface of an flat article in order to print a pattern on said surface, said flat article arranged on a conveyor means for conveying the flat article in accordance with a trajectory;

at least one printing head respectively comprising at least two printing modules that are connected to a control unit, each of the printing modules being arranged to project ink on the surface in accordance with a marking width corresponding to a portion of a surface width of the flat article;

operation of each printing module being independently controlled by the control unit,

each printing module comprising an independent microprocessor and an independent memory, and

each printing module being an extractable module comprising connecting means for individual connection to the printing head;

AMENDMENT

U.S. Appln. No. 09/555,945

2489-1-001

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cont.
R. 1
cont.*

wherein the printing modules are arranged in parallel with a degree of nonalignment with respect to each other and obliquely with respect to the trajectory of the flat article, such that the marking width of each printing module extends to the marking width of at least one adjacent printing module.

29. (new) A printing device according to claim 28, wherein the marking widths of the printing modules cover at least the surface width.

30. (new) A printing device according to claim 28, wherein the microprocessor and the memory comprised in each printing module are connected to the control unit by means of a control circuit comprised in the printing module.

31. (new) A printing device according to claim 28, comprising a plurality of series-arranged printing heads, the printing modules comprised in the printing heads being arranged such that the marking widths thereof cover at least the entire surface width.

AMENDMENT

U.S. Appln. No. 09/555,945

2489-1-001

*21
amended
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32. (new) A printing device according to claim 28, comprising at least as many parallelly-arranged printing heads as printing colors are required to print the pattern.

33. (new) A printing device according to claim 28, wherein the control unit comprises communication means for connecting with other computers and to allow remote management and verification of the device.

34. (new) A printing device according to claim 28, having a printing quality higher than 200 dpi.

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks. Claims 1-20 have been replaced with new claims 21-34. Claim 21 contains the subject matter of claims 1, 2 and 10, while claim 28 contains the subject matter of original claims 11, 12 and 20. Claims 22-27 and 32-34 are the same as previous claims 4-9 and 14-19, respectively, so that no new matter or new issues are believed to be raised by their submission. The claims as amended have therefore already been considered, and as will be